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SECURITY CLASSIFICATION CONFIDENTIAL

TO : Files, Project 2070 7 April 1952

FROM : [redacted] 50X1

SUBJECT: Conference on Infrared with Mr. C. S. Woodside

1. A conference was held on 3 April 1952 with the following people in attendance:

Mr. C. S. Woodside	Navy Dept., Bureau of Ships, Code 853
Mr. Nelson	" " " " " , " "
[redacted]	R & D Branch, OC

Tel 131 143-6 50X1

2. It was determined that the Navy's so-called IR "Walky-Talky" is the AN/PAC-1 rather than the AN/PAC-4 as reported previously. Prototype models are in existance for this equipment and production models are expected to be available in approximately 3 months. The Navy contract calls for the production of approximately 100 of these units. NA

3. A closer examination of the characteristics of this equipment reveals that there are no shoulder straps for supporting the weight of the equipment while in communication with a companion station. Instead it is hand-held and as auxiliary equipment, a monopod and a tripod are furnished to provide a more stable support. A scattering lens is used to provide a wide beam width (6 degrees) for initial location of the companion station. With the scattering lens on the night time clear weather range would be approximately 2 miles. Without the scattering lens, the beam width is reduced by a factor of 2 and the range is increased to 3 - 3 1/2 miles.

4. In general, fog renders the equipment useless. Rain, light mist, haze or smoke is much easier to penetrate but range reduction is still experienced. This is a common characteristic of IR equipment operating in the 1 micron region of the spectrum.

5. The equipment is to be powered by a 32 ampere-hour lead-acid wet battery. The transmitting battery drain is approximately 15 amperes ~~but the receiving drain is approximately 15 amperes~~, but the receiving drain is negligible in comparison. The equipment weighs 12 pounds less batteries. A metascope is provided for visual sighting of the companion station.

6. This equipment is to be demonstrated in approximately three months. Mr. Woodside agreed to notify [redacted] of the exact date to allow 50X1 representatives of this Agency to witness the demonstration.

7. Regarding our requirements for Project 2039 (Aircraft Beacon), it was learned that General Electric produces as a standard item a Flasher Beacon FT-417. This is an omni directional device utilizing a gas discharge

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radiation source. As a rough estimate it was indicated that the complete equipment with batteries would weigh approximately 20 - 25 pounds for one hour of operation. This beacon operated in conjunction with the AAR-1 metascope receiver tube would provide a range in the neighborhood of 10 miles. The AAR-1 is a small hand-held telescope weighing 1 1/2 pounds. Its associated battery pack weighs about 4 pounds.

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DLH/gm